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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/775,197 | 02/11/2004 | I-Ru Liu | BHT-3111-407 | 1631 |
| 7590 BRUCE H. TROXELL SUITE 1404 5205 LEESBURG PIKE FALLS CHURCH, VA 22041 | | 11/27/2007 | EXAMINER TRAN, TUAN A | |
| | | | ART UNIT 2618 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/775,197

Applicant(s)

LIU, I-RU

Examiner

Tuan A. Tran

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-24 and 26-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-24 and 26-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-24 and 26-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle (6,161,205).

Regarding claim 1, Tuttle discloses a batch testing system for wireless communication devices (See fig. 1) comprising: a signal generator 52 for generating a first testing signal (interrogating information); a transceiving unit 22, deployed in a shielded chamber 16 (chamber that is free of external interference or other unwanted noise) and coupled to the signal generator 52, for transmitting the first testing signal (the first testing signal is transmitted in a predetermined channel); a plurality of wireless communication devices under test (DUTs) 12 in the shielded chamber 16 for receiving the first testing signal from the transceiving unit 22 and transmitting a plurality of second testing signals (data signals) to the transceiving unit 22 in response to the received first testing signal; a signal monitoring device 54, coupled to the transceiving unit 22, for monitoring the second testing signals received by the transceiving unit 22; and a batch container 34 for loading the wireless communication devices 12, the batch container 34 being selectively integrated (support chuck or platform for loading the wireless communication devices) with the shielded chamber 16 (See figs. 1-3 and col. 3 line 38

to col. 4 line 36, col. 4 lines 40-41, col. 4 line 64 to col. 6 line 15). However, Tuttle does not explicitly mention that the shielded chamber is a shielded anechoic chamber. Since the use of shielded anechoic chamber for testing wireless communication devices is widely known in the art; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the shielded anechoic chamber for the advantage of expanding the capability of the test system to various types of shielded chambers as well as accommodating the design's intention.

Claim 20 is rejected for the same reasons as set forth in claim 1, as method.

Regarding claim 2, Tuttle discloses as cited in claim 1. Tuttle further discloses a control unit, coupled to the signal generator 52, the signal monitoring device 54 and the DUTs 12, for controlling the generation of the first testing signal and the monitoring and transmitting of the second testing signals (See fig. 3 and col. 4 lines 17-26 and col. 6 lines 11-14).

Regarding claims 3-5, Tuttle discloses as cited in claim 2. However, Tuttle does not mention that the test system further comprises a multiplexer for switching between a plurality of signal generating units of the signal generator and for switching between a plurality of signal monitoring units of the signal monitoring device. Since the test system disclosed by Tuttle comprises a single antenna (See col. 6 lines 42-43) and Tuttle does suggest that multiple wireless communication devices can be tested simultaneously utilizing various tests applied to all or to each individual wireless communication device (See abstract, col. 4 lines 21-23 and col. 6 lines 37-38); therefore, it should be necessary for the system to include multiple signal generating units and signal

monitoring units and a multiplexer for switching between them in order to selectively and properly generating and collecting test data for intended wireless communication devices.

Regarding claim 13, Tuttle discloses as cited in claim 1. Tuttle further discloses the transceiving unit 22 is an antenna (See fig. 1).

Regarding claim 14, Tuttle discloses as cited in claim 1. Tuttle further discloses the DUTs 12 are deployed in a quiet zone separately define within the shielded anechoic chamber 16 (See fig. 1).

Claim 22 is rejected for the same reasons as set forth in claim 14, as method.

Regarding claim 29, Tuttle discloses as cited in claim 20. Tuttle further discloses the second testing signals are transmitted in order in the predetermined channel by each of the DUTs 12 (See col. 6 lines 47-55).

Regarding claim 32, Tuttle discloses as cited in claim 20. Tuttle further discloses the step of selecting one or more of the DUTs 12 for transmitting the second testing signals in one or more predetermined non-overlapping channels (See col. 6 lines 47-55).

Regarding claim 34, Tuttle discloses as cited in claim 20. Tuttle further discloses the first testing signal is received in the predetermined channel by each of the DUTs 12 in order (See col. 6 lines 47-55).

Regarding claim 7-8, Tuttle discloses as cited in claim 1. However, Tuttle does not explicitly mention that the batch container is a rectangular or circular container. Since the use of rectangular or circular batch container is merely a design choice;

therefore, it would have been obvious to one skill in the art at the time the invention was made to use such containers for the advantage of giving the designer a higher degree of freedom by using various types of container for loading testing devices.

Regarding claims 9-10, Tuttle discloses as cited in claim 1. However, Tuttle does not mention the use of window-type or drawer-type loading mechanism. Since window-type or drawer-type loading mechanism is widely known in the art; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use such loading mechanisms for the advantage of expanding the capability of the test system to various types of loading mechanism in order to accommodate the design's intention as well as the user's need.

Regarding claims 11-12, Tuttle discloses as cited in claim 1. However, Tuttle does not explicitly mention the chamber is pyramidal or cubical. Since the use of pyramidal or cubical chamber is merely a design choice; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure the chamber in pyramidal or cubical for the advantage of accommodating the design's intention as well as giving the designer a higher degree of freedom by selecting among various chamber shapes.

Claim 21 is rejected for the same reasons as set forth in claim 11, as method.

Regarding claims 15-19, Tuttle discloses as cited in claim 1. However, Tuttle does not explicitly mention that the signal generator is a vector signal generator or a Golden Sample of the DUTs, and the signal monitoring device is a Golden Sample of the DUTs or a spectrum analyzer or a vector analyzer and power meter. Since such

devices are widely known in the art; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use such devices for the advantage of expanding the capability of the test system to various types of signal generator and monitoring devices as well as enhancing the test analysis by allowing the user to monitor different signal parameters.

Claims 23-24, 27-28 and 31 are rejected for the same reasons as set forth in claims 15-19, as method.

Regarding claims 26, 30, 33 and 35-36, Tuttle discloses as cited in claims 20, 29, 32 and 34. However, Tuttle does not mention that the step of analyzing minimum input power and PER, maximum output power and EVM, center frequency and power mask, downlink throughput, or uplink throughput of each of the selected DUTs in the predetermined channel. Since such testing parameters to determine operational performance of a wireless communication device are widely used in the art; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to set the Tuttle's test system up with such testing parameters for the advantage of enhancing device performance analysis in order to take appropriate actions.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tuttle (6,058,497, 5,448,110).

Response to Arguments

Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Tran whose telephone number is (571) 272-7858. The examiner can normally be reached on Mon-Fri, 10:00AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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